IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF OKLAHOMA

STATE OF OKLAHOMA,)	
)	
Plaintiff,)	
)	
v. TYSON FOODS, INC., et al.,)	Case No. 05-cv-329-GKF(SAJ)
)	
)	
)	
Defendants.)	

DECLARATION OF SCOTT A. WELLS

- I, Scott A. Wells, Ph.D., state the following:
- 1. I am a Professor in Department of Civil and Environmental Engineering at Portland State University. I have a Ph.D. from Cornell University in Civil and Environmental Engineering. My research areas are in modeling of environmental fluid mechanics, with an emphasis on surface water quality and hydrodynamics and solid-liquid separation processes.
- 2. I have been retained by the Oklahoma Attorney General as an expert witness for the State of Oklahoma ("State") in the above-captioned litigation. In particular, I was asked to prepare, and have prepared, an expert report containing my opinions and summarizing my modeling work conducted on behalf of the State.



- 3. The models and the files used in my expert report were part of the considered materials submitted to Defendants along with my report. They were contained in zipped directories downloaded directly from the computers on which the runs took place. These files contain the same information in the same order and form that resides on my computers. The directory structure was kept intact in the zipped files so that by unzipping the directories from a common directory an image of what was included on our computers would be produced.
- 4. It is clear from the questions asked by Defendants related to the modeling work and associated computer files that that they have been able to access information about the modeling.
- 5. I was retained on August 16, 2007 and did not begin work on our modeling effort until late September 2007. My final report was produced on May 29, 2008, or about 8 months after modeling work commenced.
- 6. In a similar time frame, and beginning on or before the date I began, the Defendants' consultants could have initiated and completed an analysis of the ITW system to evaluate the impact of phosphorous loading to Tenkiller Reservoir.
- 7. The Defendants have expressed concern because they cannot identify the source codes used in my modeling work. The original source codes for the modeling program I used in my Report are found on http://www.cee.pdx.edu/w2. [This was stated in my Report and pointed out by Mr Page in his letters to Mr. Bond (6/13/08) and Mr Jorgensen (6/18/08).] The source codes I used in the modeling for my Report are located in my considered materials in the file "sourcecode.zip". (This was also explained in Mr. Page's letters.) Therefore, the modifications I made to the source codes to customize the model to the IRW can readily be detected by a

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comparison of these two files. A comparison program can be used to determine any differences

between the model source code files.

8. Dr. Bierman's affidavit claims that "just looking at Dr. Wells' model, it will take

approximately 60 days just to evaluate these scenarios." He based this on my time estimate for

running the model (4-7 days) and analyzing the results (2-5 days) multiplied by the number of

scenarios (5). But his estimate is only valid if he has just 1 computer available for running the

model. If Dr. Bierman had more than 1 computer available to run the model, the time to run the

models and analyze the results would be significantly reduced. At times, we were using up to 7

computers to run the scenarios thus speeding up the processing time. If he had just 5 computers

all running separate model scenarios, the runs would be completed in 1 week and the analysis

could be performed within another week or two depending on how much staff would be

available.

9. Also, in reviewing a modeling effort of another scientist, generally much less time

is required than the time required constructing the model being reviewed. The defendants want 7

more months to review our work - this is almost as long as the time that was required for us to

construct the model.

I declare under penalty of perjury under the laws of the United States of America that the

foregoing is true and correct.

Digitally signed by Scott Wells DN: cn=Scott Wells, o, ou, email=drswells@comcast.net,

Date: 2008.06.29 14:07:39 +03'00'

Scott A. Wells, Ph.D.